

# 1996 Index

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This index covers all technical items - papers, correspondence, reviews, etc. - that appeared in this periodical during 1996, and items from previous years that were commented upon or corrected in 1996.

The Author Index contains the primary entry for each item, listed under the first author's name, and cross-references from all coauthors. The Subject Index contains several entries for each item under appropriate subject headings, and subject cross-references.

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- CMOS integrated circuit noise**
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- ECL; cf.** Emitter coupled logic
- Electrical equipment enclosures**  
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- Electrical Performance of Electronic Packaging, 4th (1995) IEEE Topical Meeting on**  
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**Thermal factors; cf. Integrated circuit thermal factors; Laser thermal factors; Optical fiber thermal factors; Semiconductor device thermal factors; Thermoelectricity; Thermoresistivity**

### Thermoelectricity

electronic packaging, temp. and stress time hist. responses. *Lau, J.H., T-CPMB Feb 96 248-254*

### Thermoresistivity

CMOS  $\mu$ P, hi-dens. C4/CBGA interconnect technol. *Kromann, G.B., +, T-CPMB Feb 96 166-173*

convectively cooled substr., transient thermal response. *Fisher, T.S., +, T-CPMB Feb 96 255-262*

VCSEL-based optoelectronic modules, thermal mgt. *Yung-Cheng Lee, +, T-CPMB Aug 96 540-547*

### Thick film circuit bonding

multichannel opt. modules compatible, fiber-in-board technol. *De pestel, G., +, T-CPMB Feb 96 116-123*

### Thick film circuit fabrication

screen printing resolu. rel., surface energies. *Liang, T.-X., +, T-CPMB May 96 423-426*

**Thick film circuit fabrication; cf. Thick film circuit bonding; Thin film circuit bonding**

### Thin film circuit bonding

multichannel opt. modules compatible, fiber-in-board technol. *De pestel, G., +, T-CPMB Feb 96 116-123*

### Thin film circuit interconnections

polyimide-Cu thin-film multilayer interconnects on ceramic substr. *Bedouani, M., +, T-CPMB May 96 382-390*

### Thin film inductors

high Q-factor inductors integrated on MCM Si substrs. *Zu, L., +, T-CPMB Aug 96 635-643*

**Thin film waveguides; cf. Optical planar waveguides**

**Time delay; cf. Delay effects**

**Time difference of arrival estimation; cf. Delay estimation**

### Time domain analysis

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MCM interconnections, freq. and time domain anal. *Salik, R., +, T-CPMB Feb 96 74-81*

### Time domain measurements

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MLC package, time-domain meas. and cct. modeling. *Jyh-Ming Jong, +, T-CPMB Feb 96 48-56*

two-port interconnection struct., cct. modeling, causality. *Sercu, S., +, T-CPMB May 96 289-295*

**Time of arrival estimation; cf. Delay estimation**

### Tin materials/devices

AuSn alloy bonding tech., microwave devices. *Rainer Dohle, G., +, T-CPMB Feb 96 57-63*

AuSn low temp. bonding of epitaxial lift off devices, optoelectronic ICs. *Dohle, G.R., +, T-CPMB Aug 96 575-580*

Cu/Sn-Pb solder joints, interfacial fatigue-crack growth, cooling rate effect. *Daping Yao, +, T-CPMB Feb 96 154-165*

pore-free reflow soldering. *Xie, D.J., +, T-CPMB Feb 96 148-153*

surface mount solder joints reliab. study, effect of Cu-Sn alloys. *So, A.C.K., +, T-CPMB Aug 96 661-668*

TAB-OLB contacts, 75  $\mu$ m pitch, long-term reliab. *Zakel, E., +, T-CPMB Feb 96 138-147*

**Transceivers; cf. TR devices**

### Transfer functions

MCM interconnections, freq. and time domain anal. *Salik, R., +, T-CPMB Feb 96 74-81*

### Transient analysis

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high-dens. electronic package interconnections, design guidelines. *Yang, Y., +, T-CPMB Feb 96 230-237*

**Transient analysis; cf. Circuit transient analysis**

### Transistor-transistor logic

leadless MCM-D electronic package, 432-pin land-grid I/O array. *Loos, J.S., T-CPMB Feb 96 174-181*

**Transition metal materials/devices; cf. Copper materials/devices; Gold materials/devices**

### Transmission line discontinuities

two-port interconnection struct., cct. modeling, causality. *Sercu, S., +, T-CPMB May 96 289-295*

**Transmission line discontinuities; cf. Couplers, Microstrip discontinuities; Optical fiber connectors; Waveguide discontinuities**

### Transmission line measurements

microelectronic interconnects, transm. line params. meas. *Abernethy, C.E., +, T-CPMB Feb 96 32-39*

**Transmission lines; cf. Coupled transmission lines; Multiconductor transmission lines; Planar transmission lines**

### Transmission line theory

CMOS multilayer substr., transm. line, full wave anal. *Jilin Tan, +, T-CPMB Aug 96 621-627*

IC interconnect, multilayer dielec., crossover capacitance. *Guang-Wen Pan, +, T-CPMB Aug 96 615-620*

MCM interconnections, freq. and time domain anal. *Salik, R., +, T-CPMB Feb 96 74-81*

**Transmitters; cf. Optical transmitters**

### TR devices

Optobus low-cost high-perform. opt. interconnect. *Schwartz, D.B., +, T-CPMB Aug 96 532-539*

**TTL; cf. Transistor-transistor logic**

**TV cameras; cf. TV image sensors**

### TV image sensors

epoxy 3D MCM, Design and eval. for portable video equipt. *Stern, J.M., +, T-CPMB Feb 96 188-194*

### Two-port circuits

two-port interconnection struct., cct. modeling, causality. *Sercu, S., +, T-CPMB May 96 289-295*

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### UHF devices

high Q-factor inductors integrated on MCM Si substrs. *Zu, L., +, T-CPMB Aug 96 635-643*

### UHF integrated circuits

high Q-factor inductors integrated on MCM Si substrs. *Zu, L., +, T-CPMB Aug 96 635-643*

### UHF spectroscopy

COPNA-resin, low temp. curing resin for high-dens. electronic packages. *Nawa, K., +, T-CPMB Aug 96 585-592*

### Ultrafast optics

opto-electronic MCM, polyimide waveguide, LD array packaging. *Koike, S., +, T-CPMB Aug 96 628-634*

**Ultra-high-frequency devices; cf. UHF devices**

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### Very-large-scale integration

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Level 1 crackfree plastic packaging technol. for VLSI. *Ganesan, G.S., +, T-CPMB Aug 96 581-584*

VLSI interconnect design automation using quantitat. and symbolic techs. *Simunic, T., +, T-CPMB Nov 96 803-812*

**Vibrations; cf. Integrated circuit mechanical factors**

**VLSI; cf. Very-large-scale integration**

## W

### Waveguide discontinuities

MIMIC interconnects, EM field coupling. *Strauss, G., +, T-CPMB May 96 278-282*

**Waveguides; cf. Multimode waveguides**

**Welding; cf. Laser welding**

### Wiring

sig. pin dens. limitations on wiring boards. *Chiba, T., +, T-CPMB May 96 391-396*



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